# Comparisons of Job Characteristics

**Focus Occupation:** Structural Metal Fabricators and Fitters (51-2041)
**Associated Occupation:** Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

| | |
|---|---|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

## Knowledge — Similarity of Focus Occupation to Associated Occupation: 67

Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)
Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|---|---|---|---|---|---|
| Mechanical | 6.8 | 12.2 | 8.6 | << | Extensive education and/or training may be required |
| Production and Processing | 6.0 | 11.6 | 6.9 | << | Extensive education and/or training may be required |
| Public Safety and Security | 6.9 | 8.0 | 2.9 | << | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Skills — Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)
Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|---|---|---|---|---|---|
| Operation Monitoring | 6.6 | 9.6 | 5.8 | << | Extensive development of skills in this area may be required |
| Operation and Control | 5.4 | 8.6 | 5.9 | << | Extensive development of skills in this area may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Abilities — Similarity of Focus Occupation to Associated Occupation: 93

**Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)**
**Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)**

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|---|---|---|---|---|---|
| Manual Dexterity | 6.5 | 9.7 | 9.2 | 0 | Current ability level may be sufficient |
| Control Precision | 6.6 | 9.6 | 8.7 | < | Some improvement in abilities may be required |
| Finger Dexterity | 7.6 | 9.6 | 8.0 | < | Some improvement in abilities may be required |
| Auditory Attention | 5.9 | 7.9 | 6.8 | < | Some improvement in abilities may be required |
| Extent Flexibility | 4.8 | 7.9 | 6.0 | << | Extensive improvement in abilities may be required |
| Reaction Time | 4.8 | 7.3 | 6.1 | < | Some improvement in abilities may be required |
| Rate Control | 3.8 | 7.2 | 3.9 | << | Extensive improvement in abilities may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

# Activities that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation: 81**

**Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)**
**Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)**

| Work Activities | Exclusivity of Activity |
|---|---|
| Examine products or work to verify conformance to specifications | 15 |
| Fabricate, assemble, or disassemble manufactured products by hand | 11 |
| Lay out machining, welding or precision assembly projects | 63 |
| Move or fit heavy objects | 8 |
| Operate hoist, winch, or hydraulic boom | 34 |
| Read blueprints | 10 |
| Read production layouts | 66 |
| Read specifications | 23 |
| Read technical drawings | 7 |
| Read work order, instructions, formulas, or processing charts | 9 |
| Recognize characteristics of metals | 62 |
| Understand technical operating, service or repair manuals | 6 |
| Use acetylene welding/cutting torch | 54 |
| Use hand or power tools | 2 |
| Use precision measuring tools or equipment | 17 |
| Use spot or tack welding techniques | 87 |
| Weld together metal parts, components, or structures | 54 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Tools and Technologies that Both Occupations Have in Common | Similarity of Focus Occupation to Associated Occupation:  83 |
|---|---|

**Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)**
**Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)**

| Tools and Technologies | Exclusivity |
|---|---|
| Computers | 1 |
| Content authoring and editing software | 1 |
| Cutting and crimping and punching tools | 3 |
| Data management and query software | 1 |
| Forming tools | 2 |
| Heating equipment and parts and accessories | 19 |
| Holding and clamping tools | 3 |
| Holding and positioning and guiding systems and devices | 23 |
| Length and thickness and distance measuring instruments | 2 |
| Lifting equipment and accessories | 3 |
| Machine tools | 7 |
| Measuring and layout tools | 3 |
| Power tools | 2 |
| Rough and finishing tools | 5 |
| Soldering and brazing and welding machinery and supplies | 6 |
| Special tooling fixtures | 16 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.